

ABSTRACT

A method and a computer with circuitry configured for performance of the method are disclosed. During a profiled interval of an execution of a program on a computer, profile
5 information is recorded describing the execution, without the program having been compiled for profiled execution. The program is coded in an instruction set in which an interpretation of an instruction depends on a processor mode not expressed in the binary representation of the instruction. The recorded profile information describes at least all events occurring during the
10 profiled execution interval of the two classes: (1) a divergence of execution from sequential execution; and (2) a processor mode change that is not inferable from the opcode of the instruction that induces the processor mode change taken together with a processor mode before the mode change instruction. The profile information further identifies each distinct physical page of instruction text executed during the execution interval.